

(12) **United States Patent**  
**Hashimoto**

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(54) **OPTICAL DISC RECORDING AND  
REPRODUCING APPARATUS FOR  
PERFORMING A FORMATTING PROCESS  
AS A BACKGROUND PROCESS AND A  
METHOD FOR FORMATTING AN OPTICAL  
DISC BY A BACKGROUND PROCESS**

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FOREIGN PATENT DOCUMENTS

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(\*) Notice: Under 35 U.S.C. 154(b), the term of this  
patent shall be extended for 0 days.

(21) Appl. No.: **09/135,588**

\* cited by examiner

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(58) Field of Search ..... 369/47, 48, 49,  
369/50, 53, 54, 58, 59, 275.3, 32

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ABSTRACT

U.S. PATENT DOCUMENTS

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An optical disc recording and reproducing apparatus can record data, which is provided in a packet having a fixed length, on an optical disc without waiting for a long time for a completion of a formatting operation. The optical disc is formatted by a formatting process performed as a background process so that another process is acceptable after a start of the formatting process. The formatting process is performed so as to fill at least a predetermined part of a recording area of said optical disc by packets having a fixed length.

21 Claims, 8 Drawing Sheets

